



# STEPS TO IMPLEMENTING AN ORGANIZATION WIDE HYPERTENSION PLAN

Leon Jerrels, MBA, MHA, RN, CPHQ

Director, Quality Improvement

Kelsey-Seybold Clinic

# DISCLOSURE TO LEARNER

- Requirement of Learner  
Participants requesting continuing education contact hours or a certificate of attendance must 1. register for the event, 2. attend the entire session, and 3. complete evaluation before leaving the conference.
- Commercial Support  
This educational activity received no commercial support.
- Disclosure of Financial Conflict of Interest  
The speaker and planning committee have no relevant financial relationships to disclose.
- Off Label Use  
There will be no discussion of off-label use during this presentation.
- Non-Endorsement Statement  
Accredited status does not imply endorsement by Department of State Health Services - Continuing Education Services, Texas Medical Association, or American Nurses Credentialing Center of any commercial products displayed in conjunction with an activity.

# ORGANIZATIONAL PROFILE

- [Kelsey-Seybold Clinic](#) is Houston's premier multispecialty group practice, founded in 1949 by Dr. Mavis Kelsey in Houston's famous Texas Medical Center. More than 400 physicians and allied health professionals practice at 20 locations and an accredited Sleep Center in the Greater Houston area. Medical services offered by Kelsey-Seybold include medical care in 55 medical specialties including primary care and specialty care, outpatient surgery centers, an accredited Sleep Center, a Radiation Therapy Center, laboratory services, advanced radiology services and other diagnostic services, 16 onsite Kelsey pharmacies and a secure web portal for patients to communicate with their Kelsey-Seybold doctors, get test results and schedule appointments.
- Kelsey-Seybold has been recognized by the National Committee for Quality Assurance (NCQA) as the nation's first accredited Accountable Care Organization and a Level 3 (highest) Patient-Centered Medical Home. Kelsey-Seybold holds the honor for the most physicians in Houston certified for excellence in diabetes, heart and stroke care by the NCQA. In addition to these recognitions, Kelsey-Seybold is home to a nationally accredited [Breast Diagnostic Center](#), [Endoscopy Center](#), [Infusion Center](#) and [Cancer Center](#).
- We process about 1.3 million patient visits annually that encompasses about 500,000 patient pool.

# WHY HYPERTENSION IS A PROBLEM?

- Hypertension is the most common condition seen in primary care.
- Hypertension costs the nation \$47.5 billion annually in direct medical expenses. Another \$3.5 billion is attributed to lost productivity each year.
- 69 percent of people who have a first heart attack, 77 percent of people who have a first stroke, and 74 percent of people with chronic heart failure have high blood pressure.
- Globally, 40 percent of adults ages 25 and older had high blood pressure in 2008.

# WHY IT WAS OUR PROBLEM?

- In June of 2013, the Cardiac Care Taskforce was created to provide oversight to all cardiac programs within the clinic. This is a physician-led, multidisciplinary committee, that consists of administrative, nursing and pharmacy staff. Upon initial assessment of our hypertension control measures (<140/90) and prevalence rates, it was determined that further improvement was required.
  - 2012 Hypertension (HTN) control: 67% of patient with HTN
  - 2012 Prevalence: 26.42% (Age 18-85)

# WHAT WE WANTED TO ACCOMPLISH

- Our organization has adopted the goal of 80% Hypertension Control to parallel the collaborative goal.
  - Join the American Medical **Group** Foundation (AMGF) Measure Up Pressure Down Collaborative, with 90 participating Group Practices.

# WHAT WE LOOKED LIKE WHEN WE STARTED

- Base line data:

Reporting Qtr.	Control Rate (<140/90)	Goal
1 <sup>st</sup> 2013	68% 19769(controlled)/28903 HTN patients	80%

- 1<sup>st</sup> quarter 2013 HTN Control Rate was 68%, which was below our projected goal of 80% HTN controlled.

# TASKFORCE RECOMMENDATION

- Baseline results were presented to Cardiac Care Taskforce in 2013.
- Taskforce recommendations:
  - Physician/Staff Education
    - Evidenced Based Measurement
      - Nurse Practice Council-**6/2014**
      - Webinar-**8/2014**
      - Departmental meetings
  - Proper placement of blood pressure cuff within exam rooms
- Proper location of Blood Pressure Cuffs Initiative Committee approval:
  - Medical Standards-July 2013
  - Quality Steering-July 2013



# FIRST APPROACH TO CHANGE

**Developed and implemented training designed to reeducate clinical staff on the importance of proper measurement procedures and techniques to achieve accurate measurements. This training focused on the following areas:**

- Subject Preparation
  - All clothing covering the location of the cuff should be removed and the person should be seated with legs uncrossed, the back and arm supported such that the middle of the cuff on the upper arm is at the level of right atrium (mid-sternum)
  - Having the back unsupported may elevate diastolic blood pressure 6 mm Hg and crossing legs may elevate systolic blood pressure 2-8 mm Hg
  - If the arm is hanging down, the blood pressure will be falsely elevated
- Cuff Placement
  - The appropriate cuff size for the patient's arm circumference is important and sleeves that are rolled up may cause a tourniquet effect and falsely elevate blood pressure
  - Inflation/deflation - the cuff must be inflated properly to cause the radial pulse to disappear and deflate at an appropriate rate
  - The observer should be properly trained
- Measurement
  - The measurement and reporting of quality of care relies on the clinic measurement
  - The patient should be seated comfortably, with the back supported and the upper arm bared without constrictive clothing. The legs should not be crossed
  - The arm should be supported at heart level, and the bladder of the cuff should encircle at least 80% of the arm circumference
  - The mercury column should be deflated at 2 to 3 mms, and the first and last audible sounds should be taken as systolic and diastolic pressure. The column should be read to the nearest 2 mm Hg
  - Neither the patient nor the observer should talk during the measurement

# NEED FOR CHANGE

**How many errors of BP measurement are seen in this photo?**

1. Three
2. Four
3. Five
4. Six
5. Seven
6. Eight



# DIFFERENCE OF TECHNIQUE

Patient supine  
rather than  
sitting

Systolic BP:  
Decrease: 3 mmHg

Diastolic BP:  
Decrease: 2-5  
mmHg

Position of  
patient's arm

Systolic BP:  
Increase/decrease  
for every 10 cm  
above or below  
heart level

Diastolic BP:  
Increase/decrease  
for every 10 cm  
above or below  
heart level

Failure to  
support arm

Systolic BP:  
Increase: 2 mmHg

Diastolic BP:  
Increase : 2 mmHg

Cuff too small

Systolic BP:  
Increase: 8 mmHg

Diastolic BP:  
Increase: 8 mmHg

## Completed January 2015

### ADULT MEDICINE BLOOD PRESSURE EQUIPMENT INSTALLATION

This spreadsheet will be sent out bi-weekly for project status, until completed/closed.

**Equipment installation must be 100% complete by December 31, 2014.**

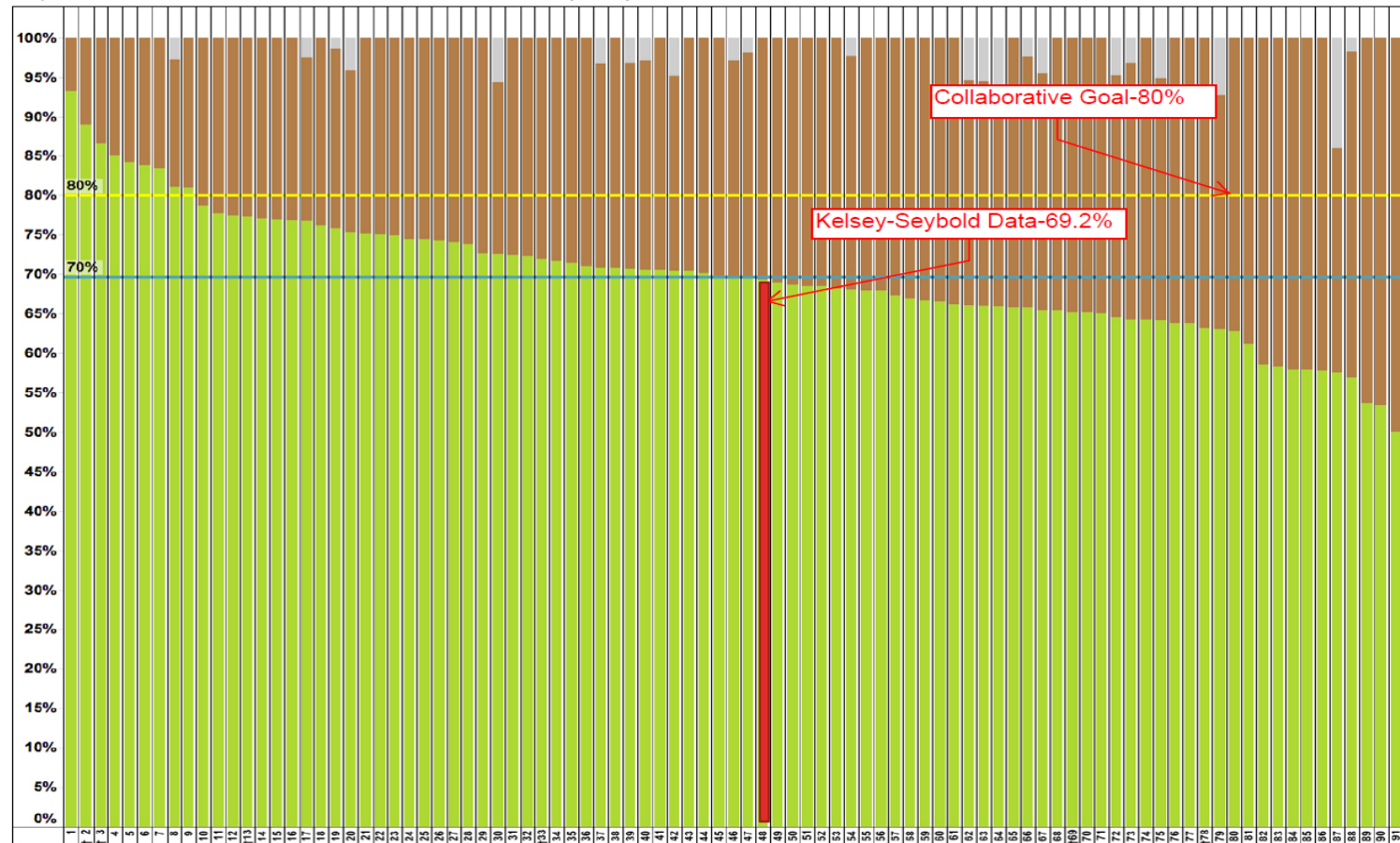
**Lawson order # 7004646, Cost \$ 97.00 each**

Clinic	Existing Equipment				# to be Purchased	Date Equipment Installation Requested	PROJECT STATUS: Open or Completed
	Department	# Wall Mounted	# On Diagnostic Board	# to Relocate			
Cinco Ranch	Adult Medicine	0	11	0	11	1/1/2015	completed
Cypress	Adult Medicine	0	30	0	30	Oct 2014	completed
Downtown Shops/HC	Family Medicine	0	18	0	18	12/20/2014	completed
Fort Bend MDC	Internal Med	0	16	0	16	1/14/2015	completed
	Family Med	0	26	0	26	1/14/2015	completed
Katy	Adult Medicine	0	12	0	12	1/1/2015	completed
Kingwood	Adult Medicine	0	18	0	18	order pending	completed
Main Campus 1	Adult Medicine	0	32	0	32	in progress	completed
Main Campus M & M Suite	Adult Medicine	0	8	8	0	11/19/2014	completed
Meyerland	Adult Medicine	3	36	0	39	Dec 20	completed
Pasadena	Adult Medicine	10	18	0	8	11/24/2014	completed
Pearland	Adult Medicine	0	27	27	0	11/21/2014	completed
Spring MDC	Adult Medicine	0	12	0	12	order ETA 12/23	completed
Summer Creek	Adult Medicine	0	21	0	20	ordered	completed
Tanglewood	Family Medicine	0	20	0	20	half order rec'd	completed
	Internal Medicine	0	21	0	21	half order rec'd	completed
Vintage	Internal Medicine	0	9	0	9	rec'd & installed	completed
	Family Medicine	0	9	3	6	in progress	completed

# RE-MEASUREMENT

Measure Up Pressure Down- 1Q 2015

Proportion of Patients with HTN whose Blood Pressure is in Control (140/90)



# ADDITIONAL CORRECTIVE ACTION


- 1<sup>st</sup> Quarter 2015 data indicated compliance to be 69.2%.(48 out of 91)  
Increased 1.2%, but continues to be below the organization goal of 80%
- Cardiac Care Taskforce recommended the development of an organizational comprehensive hypertension plan that focuses on:
  - Patient Engagement
    - Patient Tents for exam rooms
    - Ambulatory blood pressure monitoring
  - Clinical Protocol Identification and Education
    - JNC8 and others
  - Care Management
    - Development of hypertension disease management program
  - Quality Measurement
    - HTN control (<140/90)
    - Clinical Recommendation(Labs)
  - Education
    - Patient
    - Provider/Staff
  - Organizational Value
- Development and Implementation of Comprehensive Hypertension Plan presented and approved
  - Medical Standards-March 2015
  - Quality Steering-June 2015



# PATIENT ENGAGEMENT



# PATIENT PARTICIPATION



**Help Us Measure Your Blood Pressure Correctly!**

**Proper Blood Pressure Technique**

**Make Sure You Are:**

- Relaxed (relax 5 min. prior to blood pressure).
- Sitting with your back against the chair.
- Sitting with your legs uncrossed.
- Sitting with your feet flat on the floor.
- Sitting with your arm supported and elevated at the level of your heart.
- Bare skinned where the cuff is applied.
- Not talking while your blood pressure is being taken.
- Wearing a blood pressure cuff that has a bladder that fits  $\frac{3}{4}$  around your arm.

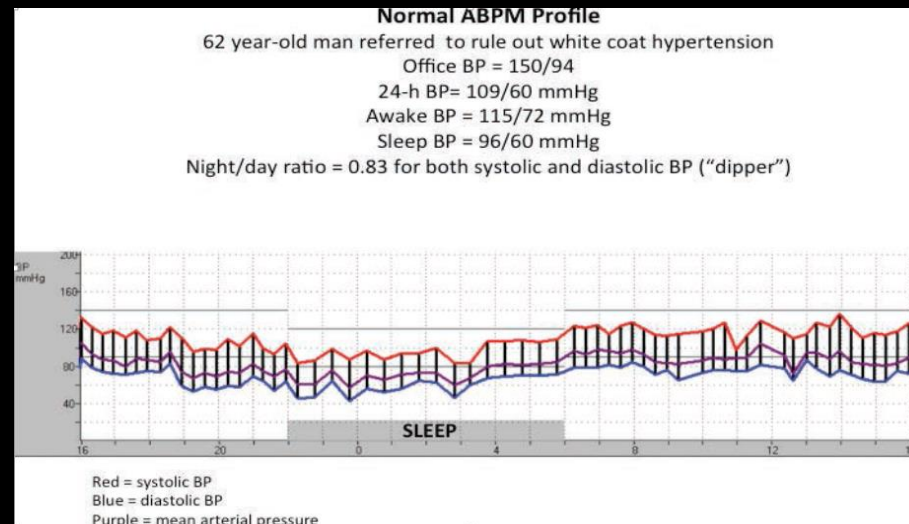
Williams, Jonathan N Engl J Med 2009;360:e6

- Proper Blood Pressure Measurement- 8/15
  - Poster created and placed in lobby/patient exam rooms to engage patients in proper blood pressure technique



# AMBULATORY BLOOD PRESSURE MONITORING

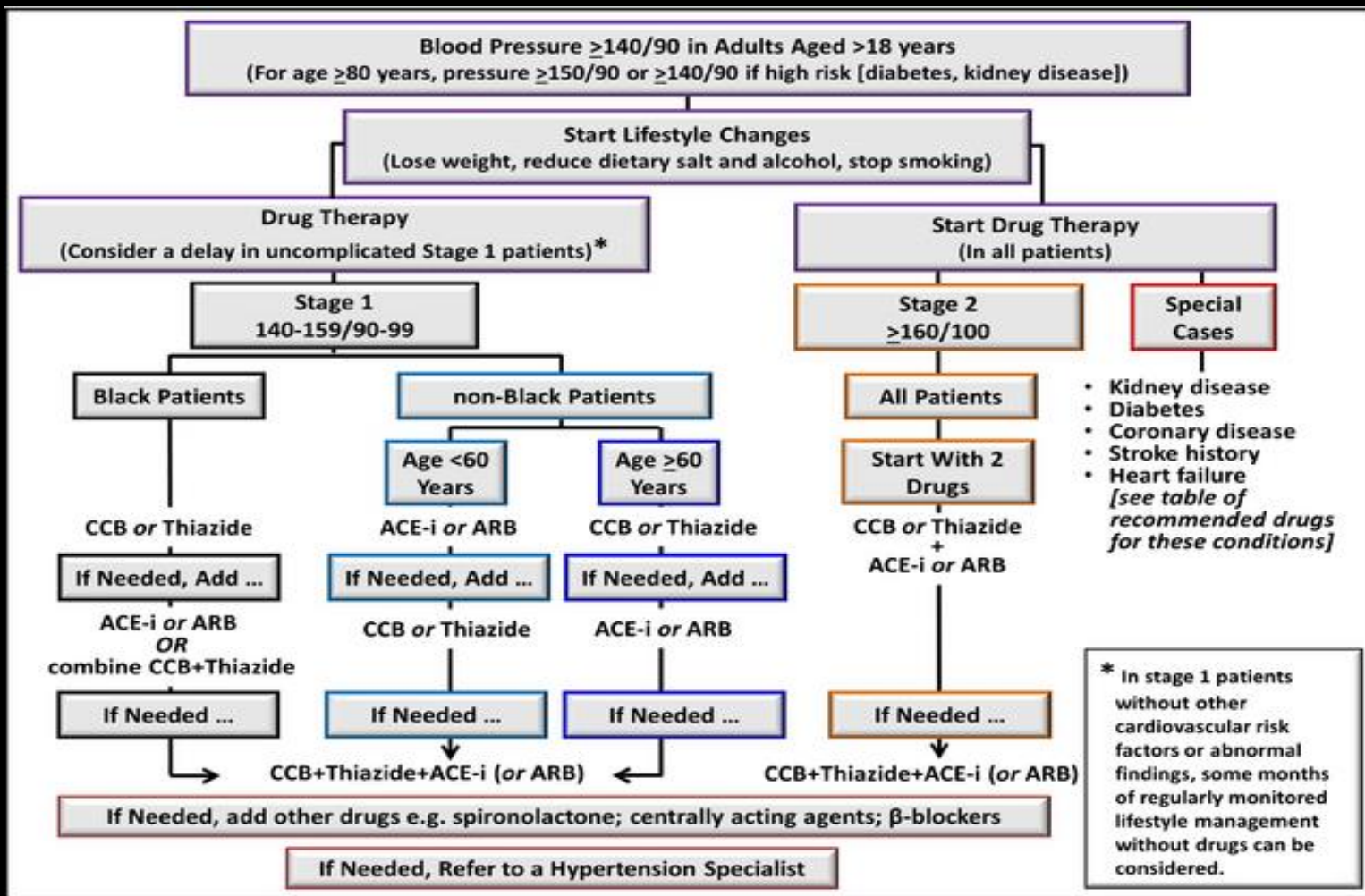
- Multiple reading over the course of 24 hours
- Superior to office BP in prediction outcomes
- Considered by many to be the noninvasive gold standard



Expanded site where services it provided by the purchase of 2 additional units and provided provider education on the benefits of utilization.



# CLINICAL PROTOCOLS HTN MANAGEMENT



## Core Differences

	> 60 years	Diabetes	CKD
ASH/ISH	140/90	130-140/80-90	130-140/80-90
ESH/ESC	140/90	140/85	130*-140/90
JNC 8	150/90	140/90	140/90
NICE	140/90	No recommendation	----

# DOCTORS ARE SPECIAL!



"I'm always the one doctor that 4 out of 5 doctors disagree with."

An abstract graphic at the top of the slide featuring a wavy, flowing shape with a color gradient from yellow and orange on the left to green and blue on the right, set against a black background.

# DISEASE MANAGEMENT PROGRAMS

### AG - HTN - Grid - NO 6 Month Wait

Measures	2014-Oct	2014-Nov	2014-Dec	2015-Jan	2015-Feb	2015-Mar	2015-Apr	2015-May	2015-Jun	2015-Jul	2015-Aug	2015-Sep
% Controlled ALL - H...				71.91%	71.84%	72.49%	72.99%	73.43%	73.71%	74.05%	74.03%	74.26%
% Uncontrolled ALL - ...				27.69%	27.63%	26.81%	26.14%	25.53%	25.11%	24.50%	24.25%	23.89%
% Mildly Uncontrolle...				23.26%	23.11%	22.35%	21.84%	21.43%	21.20%	20.84%	20.50%	20.40%
% Moderately Uncontr...				3.62%	3.63%	3.66%	3.48%	3.28%	3.17%	2.99%	3.06%	2.91%
% Severly Uncontroll...				0.81%	0.89%	0.80%	0.81%	0.82%	0.73%	0.67%	0.68%	0.57%
% Unknown ALL - HTN				0.40%	0.53%	0.70%	0.87%	1.04%	1.18%	1.46%	1.72%	1.86%
Open - HTN				11214	12221	13092	14034	14953	15704	16611	17318	18124
Open6 Months - HTN				0	0	0	0	0	0	11178	12183	13067
New - HTN				11214	1013	888	946	932	749	901	721	817
Closed - HTN				0	0	0	0	0	0	0	4	0
Non Par - HTN				0	0	0	0	0	0	0	0	0
% Seen 12 Months ALL...				99.09%	99.05%	99.00%	98.80%	98.60%	98.33%	98.09%	97.80%	97.70%
% Has HTN Prescripti...				96.15%	96.02%	95.66%	95.24%	94.95%	94.53%	94.14%	93.75%	93.24%
% Has Creatinine ALL...				94.10%	93.31%	93.13%	92.78%	92.30%	91.82%	91.53%	91.26%	91.27%
% Has Urinalysis ALL...				79.13%	78.80%	78.40%	78.13%	77.36%	76.40%	76.05%	75.73%	75.69%

- Care Management has initiated a disease management program for HTN-6/2015
  - Outreach to members who have not had PCP or Cardiology f/u visit in the past year.
  - Members with severe hypertension will be referred to RN case managers for outreach



# QUALITY MEASUREMENT























# HEALTH MAINTENANCE REPORTING

## HTN Control Measures


Provider	Total Visits	Patients								Diabetes Compliancy			Hypertension Compliancy				Adult Health Maintenance Compliancy			
		Unique Pts	% Age < 20	% Age 20-44	% Age 45-64	% Age >= 65	% DM	% HTN	% Lipid	% HBA1C	% MAC	% Pneum	% BUN / Crea	% EKG	%BP Ctrl 18-59	%BP Ctrl >=60	% Mamm o *	% Pap	% Colon *	% Bone Density
	1108	869	8%	47%	37%	8%	7%	20%	19%	95%	94%	82%	94%	76%	57%	81%	80%	49%	50%	77%
	413	368	1%	29%	43%	26%	20%	45%	47%	96%	86%	95%	98%	84%	83%	89%	90%	63%	67%	88%
	778	557	1%	20%	39%	40%	19%	48%	40%	94%	84%	91%	100%	77%	87%	94%	90%	55%	78%	90%
	378	321	4%	54%	28%	13%	15%	23%	21%	98%	85%	49%	97%	52%	71%	94%	81%	54%	64%	65%
	1089	946	4%	52%	27%	17%	8%	14%	7%	88%	77%	51%	87%	53%	49%	81%	80%	44%	64%	74%
	1088	954	8%	50%	30%	12%	5%	6%	7%	77%	86%	75%	78%	56%	49%	75%	68%	49%	52%	80%
	828	707	2%	27%	40%	30%	17%	35%	29%	94%	92%	63%	98%	87%	62%	79%	86%	42%	64%	78%
	978	790	2%	20%	36%	42%	24%	42%	36%	98%	93%	90%	96%	66%	80%	96%	89%	48%	71%	85%
	941	786	12%	51%	31%	7%	5%	14%	7%	88%	88%	51%	91%	46%	50%	91%	72%	44%	55%	77%
	860	741	2%	17%	38%	43%	25%	35%	42%	97%	95%	83%	94%	60%	61%	89%	72%	36%	67%	82%
	124	96	0%	3%	17%	80%	45%	77%	82%	98%	88%	98%	96%	61%	50%	90%	90%	28%	87%	95%
	826	682	2%	40%	37%	21%	13%	20%	17%	95%	84%	72%	98%	64%	53%	94%	88%	66%	60%	85%
	1056	903	7%	50%	32%	11%	7%	16%	11%	92%	84%	78%	92%	39%	61%	89%	76%	43%	50%	82%
	336	279	2%	31%	39%	27%	26%	41%	34%	99%	94%	86%	100%	57%	79%	92%	85%	54%	69%	91%
	1083	978	1%	59%	35%	4%	4%	12%	7%	95%	88%	44%	90%	42%	74%	88%	79%	50%	69%	47%
	1011	897	5%	43%	35%	17%	10%	25%	19%	96%	81%	57%	92%	71%	48%	73%	76%	44%	44%	54%
	1008	762	1%	50%	35%	14%	8%	20%	26%	98%	98%	78%	96%	73%	75%	89%	76%	46%	69%	81%
	904	694	6%	46%	38%	10%	3%	9%	7%	95%	81%	43%	94%	69%	67%	78%	74%	39%	46%	68%
	635	534	2%	24%	43%	31%	24%	34%	39%	98%	95%	94%	98%	84%	83%	91%	89%	65%	73%	92%
	1425	1202	6%	33%	42%	19%	11%	23%	22%	99%	95%	95%	98%	83%	58%	83%	80%	45%	58%	83%
	979	805	4%	31%	40%	25%	16%	30%	25%	95%	97%	91%	95%	85%	60%	86%	89%	65%	78%	95%
	1067	910	1%	38%	36%	24%	10%	21%	14%	95%	81%	65%	93%	48%	70%	82%	75%	43%	61%	68%
	945	803	2%	25%	43%	29%	20%	35%	42%	98%	94%	90%	96%	83%	77%	94%	85%	45%	74%	94%
	906	796	3%	28%	46%	24%	22%	28%	29%	100%	94%	79%	96%	66%	87%	92%	86%	47%	69%	82%
	550	476	4%	37%	37%	22%	19%	30%	25%	96%	91%	71%	96%	44%	67%	91%	79%	51%	55%	86%
	1144	911	4%	35%	41%	19%	14%	26%	28%	93%	90%	82%	93%	69%	61%	82%	74%	35%	63%	84%
	1024	901	5%	28%	39%	28%	13%	30%	39%	96%	93%	90%	97%	49%	72%	89%	70%	49%	64%	75%

Quality Metrics for hypertension control have been incorporated into the Adult Medicine Care Maintenance reports- 7/2015

# PROVIDER DASHBOARD

Provider										
Specialty	Internal Medicine									
Practice Overview:			Internal Medicine (Avg)							
Overall Patient Count			1,293		1,725					
Overall Health Metrics:			Internal Medicine (Avg)							
% Male			43%		55%					
% Female			57%		45%					
% MKO			76%		81%					
% Diabetics			17%		16%					
% Diabetics with Complications			86%		92%					
% CHF			3%		3%					
Health Maintenance	2015-Q4	2016-Q1	2016-Q2	2016-Q3	2016-Q4	2017-Q1	2017-Q2	2017-Q3	Last 4 Qtr	Trend
Visits	1027	1039	825	889	917	859	842	183	2801	
Patients	891	820	676	732	747	659	681	175	2262	
Mammogram*	86%	81%	77%	85%	81%	82%	85%	82%	83%	
Colonoscopy*	75%	66%	70%	75%	78%	81%	81%	78%	80%	
A1C	93%	94%	93%	94%	96%	98%	93%	97%	96%	
BUN/Cr	93%	95%	92%	95%	96%	97%	97%	96%	97%	
MAC	88%	87%	87%	90%	93%	93%	94%	95%	93%	
Pneumococcal	78%	86%	82%	81%	84%	88%	87%	87%	87%	
HTN - BP Ctrl (18-59) - PCP	61% (109)	77% (86)	79% (91)	71% (104)	78% (92)	75% (71)	83% (77)	94% (18)	80% (258)	
HTN - BP Ctrl (60+) - PCP	92% (173)	91% (194)	86% (161)	91% (179)	91% (191)	92% (202)	93% (189)	96% (52)	92% (634)	
HTN - BP Ctrl (All) - PCP	80% (282)	87% (280)	83% (252)	83% (283)	87% (283)	87% (273)	90% (266)	96% (70)	89% (892)	
Diabetic With Statin Order	99%	97%	95%	96%	93%	90%	90%	88%	90%	
*NOTE: Mammogram and Colonoscopy metrics only apply to HMO patients, for above grid.										
Problem List Maint - PCP	2015-Q4	2016-Q1	2016-Q2	2016-Q3	2016-Q4	2017-Q1	2017-Q2	2017-Q3	Last 4 Qtr	Trend
Diabetes	89% (150)	97% (122)	98% (124)	99% (134)	97% (133)	97% (136)	99% (126)	96% (47)	98% (442)	
Hypertension	96% (328)	96% (300)	98% (283)	98% (310)	98% (336)	98% (316)	99% (305)	100% (91)	99% (1048)	
Hyperlipidemia	91% (403)	96% (340)	99% (328)	98% (376)	99% (409)	98% (381)	100% (388)	98% (121)	99% (1299)	
CKD	91% (64)	95% (81)	98% (57)	96% (68)	97% (77)	97% (88)	97% (75)	100% (33)	97% (273)	
CHF	81% (36)	77% (26)	95% (19)	92% (24)	93% (28)	92% (25)	92% (25)	100% (10)	93% (88)	
Hypothyroidism	76% (91)	92% (76)	97% (70)	97% (77)	99% (92)	97% (91)	100% (92)	100% (28)	99% (303)	
Atrial Fibrillation	93% (28)	90% (31)	96% (28)	96% (26)	92% (39)	100% (33)	100% (35)	100% (8)	97% (115)	
CAD	88% (42)	100% (54)	96% (56)	100% (70)	99% (71)	98% (84)	99% (75)	100% (26)	98% (256)	

## Provider/Staff Education



### MEASURING BLOOD PRESSURE TALKING POINTS

#### PREVALENCE

- One in three American adults have high blood pressure
- Hypertension is the most common condition seen in primary care (JNC 8, 2014)

#### DIAGNOSIS & TREATMENT

- Diagnosis and treatment of hypertension are based on an accurate measurement of auscultatory blood pressure.
- **However, blood pressure reading is one of the most inaccurately performed measurements in the clinical setting**

#### SOURCES OF MISMEASUREMENT

- Position of the patient (back and feet unsupported, position of arm, arm unsupported, arm at incorrect level, hand not palm up)
- Wrong size cuff
- Incorrect placement of the cuff
- Not inflating cuff high enough
- Releasing the cuff pressure too rapidly
- Stethoscope not directly above the artery
- Manometer not at eye level
- Incorrect interpretation of the heart sounds
- Talking with patient during procedure

- Nurse re-education
  - Screen shot of talking leaflets and posters that were created to remind the nurse of not only the importance of proper blood pressure measurement, but also gives steps to proper blood pressure technique
  - Skills Assessments are conducted when hired and annually thereafter to assure proper blood pressure technique

An abstract graphic at the top of the slide featuring a wavy, flowing shape with a color gradient from yellow and orange on the left to green and blue on the right, set against a black background.

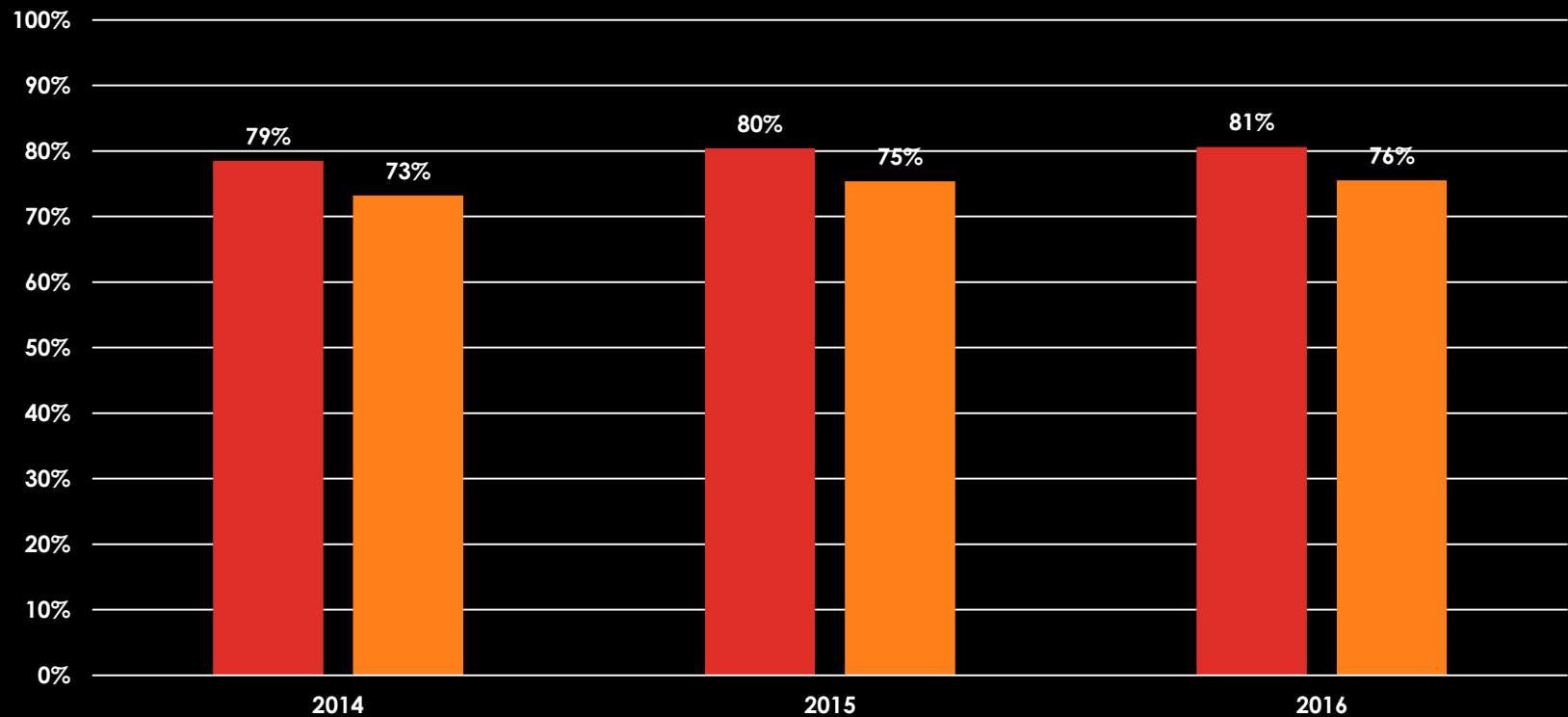
# ORGANIZATIONAL VALUE

# WHAT IS THE VALUE TO US?

- Improves clinic and patient outcomes
  - 20% KSC adult population has HTN
- Reduces patient and organizational costs of care
- Assist in increasing the Health Plan's Overall Medicare Star Rating for 2015
  - Hypertension rating was 4

## Hypertension Compliance\* Ages 18-85

■ ACO Population ■ Total Population



\*Ages 18-59  
<140/90  
Ages ≥ 60  
<150/90



# COMMUNICATION OF FINDINGS

- Board Approval
- Quality Steering
- Medical Standards
- Nurse Practice
- Departmental Meeting
- Provider Dashboards

# ROAD SHOW- NURSING STAFF MEETING

- Dr. Chisolm – Education on proper blood pressure measurement in clinic (monitoring preparation, proper positioning, techniques, documentation)
- Nurses are on the front line, doctors rely on clinical staff to report accurate BP measurements
- Clinical decisions are frequently based on office blood pressure for disease management
- It is imperative that the measurement that is used is as accurate as possible in order to provide excellent patient care.



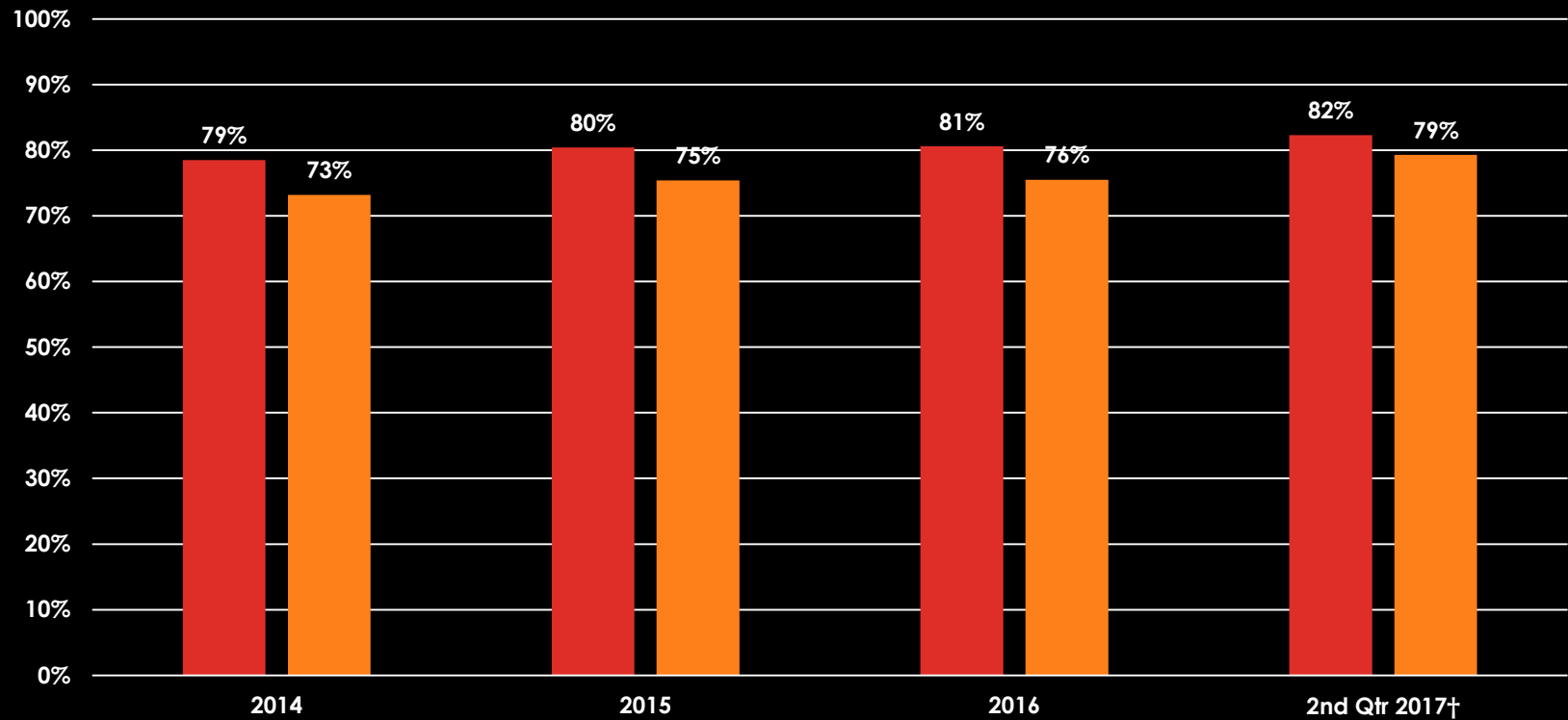


# ROAD SHOW PROGRESS

HYPERTENSION ROAD SHOW	
LOCATION	COMPLETION DATE
SIENNA PLANTATION	5/16/2017
CYPRESS	4/21/2017
SUMMER CREEK	4/25/2017
MC- PULMONARY	4/18/2017
KINGWOOD	5/11/2017
PASADENA	5/24/2017
TANGLEWOOD	7/27/2017
HOUSTON CENTER	7/10/2017
VINTAGE	7/25/2017
MC-CARDIOLOGY	5/19/2017
CLEAR LAKE	8/24/2017
KATY	7/28/2017
FORT BEND	8/22/2017
SPRING	8/16/2017
MC-EXECUTIVE HEALTH	
MC-PRIMARY CARE	
MEYERLAND	
CINCO RANCH	
PEARLAND	

## Hypertension Compliance\* Ages 18-85

■ ACO Population ■ Total Population



\*Ages 18-59 <140/90  
Ages ≥ 60 <150/90

† 1/1/2017-  
6/30/2017



# WHAT'S NEXT?

- Specialty Care- Move all BP Cuff to the proper location
- Annual Education- Webinars

# CITATIONS

## **1) Recommendations for Blood Pressure Measurement in Humans and Experimental Animals**

**Part 1: Blood Pressure Measurement in Humans: A Statement for Professionals From the Subcommittee of Professional and Public Education of the American Heart Association Council on High Blood Pressure Research**

Thomas G. Pickering, John E. Hall, Lawrence J. Appel, Bonita E. Falkner, John Graves, Martha N. Hill, Daniel W. Jones, Theodore Kurtz, Sheldon G. Sheps, Edward J. Roccella

Hypertension. 2005;45:3-8, originally published December 30, 2004

# QUESTIONS?



"I'm getting a second opinion from  
some blogs on the internet."